



What is I-NEDSS?

The Indiana National Electronic Disease Surveillance System (I-NEDSS) is a Web-based application that promotes the collection, integration, and sharing of data at federal, state, and local levels.

The purpose of I-NEDSS is to automate the current process for reportable diseases, as defined by Indiana Administrative Code 410 (<http://www.in.gov/legislative/iac/T04100/A00010.PDF>).

The system will include electronic lab reports (ELRs), communicable disease reports (CDR), and case investigations. Eventually, I-NEDSS will replace the paper-based reporting system currently in use.

Benefits of I-NEDSS include:

- 1. increased speed**
- 2. increased accuracy**
- 3. increased accountability**
- 4. increased security**
- 5. increased situational awareness for state and local investigators**

The process starts with a patient and an observation. Observations are confirmed/ or suspected accounts of disease based on either a lab report or a Communicable Disease Report (CDR) from a lab, hospital, or practitioner.

For a lab report, the moment the sample is released and identified as positive; it is routed to the ISDH Epi Resource Center (ERC) for review by the Disease Subject Matter Epidemiologist (DSME). The DSME reviews the lab and forwards it onto the appropriate local health department (LHD) electronically if a case investigation should be conducted. The whole process is designed to happen in a matter of minutes.

For a CDR, the process is much more straightforward. Once a CDR is submitted by a hospital or healthcare provider it is sent directly to the local health department with a notification forwarded to ISDH. The information is transmitted in real-time.

The investigation is the jurisdiction of the LHD where the patient resides. I-NEDSS is built to follow these rules, but it is also built with a degree of flexibility.

For instance, a LHD may review the observations and/or begin a Case Investigation and then decide that they do not have jurisdiction. Jurisdiction may be transferred with recommendation of the LHD investigator and the approval of the DSME. The process is all conducted electronically in a secure environment.

I-NEDSS also does not require an observation before the LHD begins a Case Investigation. Case Investigations can be initiated by the LHD based on phone calls, email requests, or other means. I-NEDSS will allow for an investigation to be executed directly by the LHD in these situations.

Investigations that are started by the LHD are also noted by the DSME at ERC, as well as by the ERC Field Epis. In this manner, an ISDH epi is made aware of the investigation based on disease and also based on geographic area (district). This allows Public Health improved surveillance capabilities when it comes to tracking and responding to possible disease outbreaks within the State of Indiana.

When investigations are completed, the results are submitted by the LHD to ISDH. The approval process includes a review by the DSME. Once completed, case information is stored and reported to various entities, including the local health departments and the Center for Disease Control (CDC).

Through partnerships with the Regenstrief Institute, the Mayo Clinic, and the Indiana State Public Health Lab, ELRs are continually monitored for data-quality and improvement. Through compliance with HIPPA and PHIN (Public Health Information Network), data gathered in I-NEDSS is kept secure with access granted only to those with proper jurisdiction to conduct an investigation.

Through a partnership with the CDC, ISDH, Indiana hospitals, practitioners, reference labs, all 94 Local Health Departments in the State of Indiana and the utilization of I-NEDSS for electronic disease reporting; Public Health capabilities for reporting and assessment of diseases and potential outbreaks can be greatly improved to provide security for the citizenship which we serve.